

WHAT IS CLAIMED IS:

1. An integrated circuit, comprising:
a useful circuit comprising an internal voltage line;
a test circuit for testing the useful circuit;
a test terminal coupled to the test circuit in order to provide an activation signal activating the test circuit to perform a test function; and
a switching device to selectively couple the test terminal to the internal voltage line during testing of the test circuit.
2. The integrated circuit of claim 1, wherein the test terminal is coupled to the internal voltage line to provide an electrical signal to the internal voltage line from an external source.
3. The integrated circuit of claim 1, wherein the switching device is further configured to isolate the test terminal from the test circuit after the activation of the test circuit.
4. The integrated circuit of claim 1, wherein the useful circuit further comprises an internal voltage supply.
5. The integrated circuit of claim 4, further comprising another switching device responsive to the switching signal to selectively couple the internal voltage supply to the internal voltage line.
6. The integrated circuit of claim 5, wherein the switching devices are operated reciprocally so that when the test device is coupled to the internal voltage line the internal voltage supply is disconnected from the internal voltage supply.
7. An integrated circuit, comprising:
a useful circuit comprising an internal voltage line;
a test circuit for testing the useful circuit;
a test terminal coupled to the test circuit in order to provide an activation signal activating the test circuit to perform a test function; and

a switching device coupled to an output of the test circuit and configured to selectively couple the test terminal to the internal voltage line in response to a switching signal from the output.

8. The integrated circuit of claim 7, wherein the test circuit is configured to output the switching signal in response to receiving the activation signal.
9. The integrated circuit of claim 7, wherein the test terminal is coupled to the internal voltage line to provide an electrical signal to the internal voltage line from an external source.
10. The integrated circuit of claim 7, wherein the switching device is further configured to isolate the test terminal from the test circuit after the activation of the test circuit.
11. The integrated circuit of claim 7, wherein the test circuit comprises a memory element to store an activation information item dependent on the application of the activation signal, and wherein the switching signal is issued by the test circuit in response to storing the activation information item.
12. The integrated circuit of claim 7, wherein the test circuit is configured to deactivate after the integrated circuit has been connected to a voltage supply.
13. The integrated circuit of claim 7, wherein the useful circuit further comprises an internal voltage supply.
14. The integrated circuit of claim 13, further comprising another switching device responsive to the switching signal to selectively couple the internal voltage supply to the internal voltage line.

15. The integrated circuit of claim 14, wherein the switching devices are operated reciprocally so that when the test device is coupled to the internal voltage line the internal voltage supply is disconnected from the internal voltage supply.

16. A test system for testing an integrated circuit, comprising:
a useful circuit comprising an internal voltage line;
a test circuit for testing the useful circuit;
a test terminal coupled to the test circuit in order to provide an activation signal activating the test circuit to perform a test function;
a switching device coupled to an output of the test circuit and configured to selectively couple the test terminal to the internal voltage line in response to a switching signal from the output; and
an external test device connected to the integrated circuit via the test terminal and comprising (i) a test module for issuing the activation signal; and (ii) a power supply for providing an electrical signal to the internal voltage line after the activation of the test circuit.

17. The test system of claim 16, wherein the external test device further comprises an external test device switch for selectively coupling the test module and power supply to the test terminal.

18. The test system of claim 16, wherein the test circuit is configured to output the switching signal in response to receiving the activation signal.

19. The test system of claim 16, wherein the switching device is further configured to isolate the test terminal from the test circuit after the activation of the test circuit.

20. The test system of claim 16, wherein the useful circuit further comprises an internal voltage supply.

21. The integrated circuit of claim 20, further comprising another switching device responsive to the switching signal to selectively couple the internal voltage supply to the internal voltage line.

22. The integrated circuit of claim 21, wherein the switching devices are operated reciprocally so that when the test device is coupled to the internal voltage line the internal voltage supply is disconnected from the internal voltage supply.

23. A method for testing an integrated circuit comprising a test circuit and a useful circuit to be tested by the test circuit, the method comprising:

applying an activation signal to a test terminal of the integrated circuit while the test terminal is coupled to the test circuit and disconnected from an internal voltage line of the useful circuit; and

activating a first switch to couple the test terminal to the internal voltage line after application of the activation signal, whereby the internal voltage line is provided with external power for the testing.

24. The method of claim 23, wherein the activation signal activates the test circuit to perform a test.

25. The method of claim 23, wherein the first switch is activated in response to an output signal issued by the test circuit in response to the activation signal.

26. The method of claim 25, further comprising activating a second switch in response to the output signal to disconnect an internal power supply from the internal voltage line.

27. The method of claim 23, further comprising disconnecting the test terminal from the test circuit upon activating the first switch.

28. The method of claim 27, activating a second switch in response to the output signal to disconnect an internal power supply from the internal voltage line.